**W3 Frontend Development**

**Activity Directions**

Estimated time: 30 minutes

One of the goals of this course is to introduce you to many of the different career options available in Web Design and Development. The first we will learn about is that of Frontend Developer.

Watch this introduction to this career by Treehouse. It introduces the type of work you would be doing, along with the skills you would need to succeed. It will also review many of the concepts we have already been learning in the course.

Transcript: What You Need to Know to be a Front-End Developer in 2018 BYU-Idaho Online Learning Video Transcript What You Need to Know to be a Front-End Developer in 2018 [One speaker.] [Porth speaks to the camera, different shots of the studio she's in are shown.] Treasure Porth: Trends in front-end development are always changing. What worked yesterday may not work today. This can make being your front-end developer pretty challenging, but what's most challenging about being your front-end developer is also what's most exciting: you're always learning new technologies. So if you're an aspiring front-end developer or you're learning front-end technology, here's what you need to know to be a frontend developer in 2018.

[Stock Image of an office, then animation of front end and back end areas.] First up, what is a front-end developer? There are generally two parts to any web application. The front-end, or client side of the web app is everything you see and interact with in the browser as a user of the application. Then there's **the back-end, or server side of the web application where the application's data is saved, updated, manipulated, and sent back to the client side.**

**Think of your favorite video site.** When you click on that video of waterskiing puppies, the video is retrieved from a database and served you by a server. That's the backend. The front end displays it for you in the browser, allowing you to interact with the video by providing buttons to blow up the video to full screen, pause, rewind, or share with your grandma. [Animation shows these things.]

As a web developer, you'll likely need to have some knowledge of how the front and back ends of an application interact with each other. However, many companies split these roles into two careers: a front-end developer and a back-end developer. Back-end developers use languages like Java, Python, Ruby, and PHP to build the behind the scenes functionality of a web site, such as storing and retrieving user data or securely accepting and storing credit card numbers. A front-end developer is a generic term for someone who builds the user facing parts of websites and applications, using HTML, CSS, and JavaScript. Nearly every business uses a website or application to communicate to its customers. The world needs the skills of a frontend developer. In this video I'm going to talk to you about what you need to know to be a more general but still awesome front-end developer. [Screen summarizes her words over stock images of developers and animations.] To be a front-end developer you'll need to learn many different technologies, but the main technologies are HTML, CSS, and the script. HTML, or Hypertext Markup Language is the foundation of every web page. Without it, everything on the internet would be a shapeless wall of text. With HTML, you provide the web browser with information about how your content is structured by defining its different parts. For example, you surround the content of your web Transcript: What You Need to Know to be a Front-End Developer in 2018 pages within different HTML tags to tell the browser which parts are headings, sidebars, a footer, or main area of the site. One of the goals of HTML is to provide good semantic markup. That is: provide information about what kind of content the HTML tag contains. You use HTML to define which elements are links, list items, buttons, paragraphs, checkboxes, radio boxes, and so on. This not only helps you style a page with CSS, but search engines use this information to understand your pages, and semantic markup helps accessibility tools like screen readers make more sense of your content. CSS, or Cascading Style Sheets is a design language with a lot of power. CSS helps us describe the presentation of web pages. We use CSS to define how HTML should look and be laid out. For example, we can use CSS to tell the browser that we want our web page to display in a certain number of rows or columns or how much space should be between each element. We'd also use CSS to change the color or font size of a button. Make it wider or taller, bigger or smaller, place it on the left, right or middle of the webpage, and so on. Part of writing good CSS means making sure designs are consistent across different devices. We use CSS to make web pages responsive. That means that they look good and function well on any screen size or device. CSS seems deceptively easy at first, but it can quickly become challenging. The nuances of formatting and styling are tough, and you've got thousands of options at your disposal. You may need to consult a ton of different references and resources to get things right. It requires a lot of practice. Javascript is the first programming language that you're likely to learn as a front-end developer. It's a continuously evolving language that's used nearly everywhere these days. On the frontend, back-end, on mobile, and even desktop devices. Like everything else it can be challenging but fun to learn. Generally front-end developers write JavaScript for the browser using the Dom, or Document Object Model. The Document Object model is like a representation of your web page or application that allows JavaScript and the browser to communicate. Each HTML element on your web page is represented by the Dom and you can use JavaScript to manipulate those Dom elements. For example, say you have some text on your web page that reads “click me.” You'd use HTML tags to define that text as a button. With CSS, you'd control what that button looks like. Finally, with JavaScript, you'd write code that triggers the page or application to do something every time the button is clicked, like play a video or submit a comment to a social media post.

If you're serious about being a front-end developer, JavaScript is a language you'll want to master. These are some of the main tools and technologies that you'll use on a daily basis as a front-end developer. [Screen reads: Front End Tools, Text Editor, Browser Development Tools, Version Control.] The text editor is where you'll spend most of your time. It's where you write the code for a given site or app. Microsoft's Visual Studio Code, Atom, or Sublime Text are popular choices in 2018. Don't worry too much about which one you should use. You can try them all and figure out which one you like best. Developer tools for Google Chrome and Firefox lets you look at any website and see how it's structured. Dev tools help you evaluate and debug your applications, step through JavaScript code, and manipulate and experiment with your application CSS. Transcript: What You Need to Know to be a Front-End Developer in 2018 Git is a popular version control system. Version control systems help you to track and save changes to your project, so that you can easily manage different versions and features. You can also revert to previous versions of your projects or work on a single codebase as part of a team. Github is a specific service that allows you to share your code online, as well as fork, or make copies of other existing code bases, so you can work on them yourself or see how they're made. Let's talk about a few more technologies that are common for front-end developers to learn. [Screen reads: Other Important Technologies, Sass/CSS Preprocessors, Javascript Libraries, JS Frameworks, Command Line CLI, Module Loading/Bundling Tools, WordPress, Image Editors, Wireframe Tools.]

Once you have a good understanding of CSS, you'll be ready to learn Sass. Sass is what's known as a CSS preprocessor. Basically, it adds useful features to CSS that make writing, organizing, and maintaining the CSS easier, a lot easier. [Screen shows examples of each website talked about.]

Let's talk about JavaScript libraries and frameworks. jQuery has been around since 2006 and is still widely used on a lot of websites. It's not the newest library but still worth knowing as a front-end developer, as it lets you quickly and easily add complex JavaScript interactions to your webpages.

Newer JavaScript libraries and frameworks include React, Angular, and Vue.js. These are all designed to make it easier to create and maintain complex web applications. Typically those that display large amounts of data, or complex data, have complex user interfaces, or are made up of many different UI elements and components.

Twitter Bootstrap is a design framework that provides a variety of design templates for common website and web application components, like typography, forms, buttons, and navigation menus. By adding pre-styled bootstrap CSS classes to your HTML, you can quickly layout and style your web pages. Bootstrap makes it easy to drop in and set up common user interface components like photo carousels and modal windows. Learning how to use the terminal, or the command line, will give you greater control over the functionality of your computer. It'll help you install different software packages and libraries, as well as use version control systems, like Git, more quickly and efficiently than using a graphical user interface. No matter what kind of development you do, front-end or back-end, knowledge of the terminal will help you succeed.

[Different animations of the bundling tools appear as they are discussed.] As your projects grow larger and more complex, you'll find that they're made up of many different parts, frameworks, modules, libraries, and tooling. Bundling tools like Web Pack and Browserify with Gulp help you minify and bundle your code so it can be loaded quickly and efficiently into the browser, helping your applications load faster. 25% of the web is WordPress. WordPress is a content management system that is free and open-source. WordPress is extremely versatile, and while it has a reputation as a blogging platform, you can extend the functionality of any wordpress site by using any of the thousands of free and open source plugins.

Photoshop is the behemoth when it comes to editing images for the web, but Sketch is a great lightweight tool that is designed for creating vector images. Sketch is a modern tool built for the web. Both are paid tools that require a perpetual license. Transcript: What You Need to Know to be a Front-End Developer in 2018 Wireframes are your plans or sketches for websites before you begin to build them. Both Balsamiq and Figma have cloud-based tools that let you create and share an idea in its early stages before you commit the time to creating it in full. As a front-end developer, you'll likely build webpages and applications based on a design or wireframe provided by a web designer, rather than designing directly with these tools yourself. There can be some overlap, however, so it's helpful for a front-end developer to know the basics of using these technologies.

This was a long list and you may be asking yourself, “How will I ever learn all this stuff?” It can feel daunting especially when the tools and technologies of 2018 are likely to change in 2019 and beyond. Just know that it's normal to feel this way.

Take things one step at a time, create a learning strategy, and commit to learning and practicing as much as you can. The concepts, principles, and tools that you learn from one programming language or framework will make it much much easier to learn similar concepts, principles, and tools for another language or framework.

So don't feel like you need to learn everything all at once. There are tons of resources for learning how to be a front-end developer - podcasts, video tutorials, books, apps, conferences, meetups - just tons of things. And while it's a challenge to filter out what's most valuable, as most of these resources are going to be talking about things you won't understand just yet, immerse yourself in the language and take it all in.

Concentrate at first by getting comfortable with the basics: HTML, CSS, and JavaScript, and the rest will come in time. Learning a new technology is hard and one of the hardest things about approaching a career like front-end development is figuring out what you need to know when you don't know what you need to know.

I'm a teacher at Treehouse, an online school where you learn at your own pace. At $25 a month, you get access to the front-end web development track, which has on-demand content that includes videos, quizzes, and code challenges that will teach you HTML, CSS, JavaScript, and more, everything you need to know to start out as a front-end web developer. Click the link at the top of the description of this video to start your seven day free trial at Treehouse and get started on the front-end web development track and I'll see you there. I teach the first course. [End of video.]

Also, read this [Web Designer article](https://www.theartcareerproject.com/careers/web-design/) carefully for more information.

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Do you search with Google or Bing? Chances are that you bookmarked the search engine you prefer as well as the sites you visit frequently for a good reason – they’re both visually appealing and easy to use. Web designers help create that perfect combination of form and function to earn their living. Designers use typography, imagery, and other visual devices, to create a digital universe where you can find the information you need and enjoy searching for it. It’s the perfect job for someone who is, as [Big Future](https://bigfuture.collegeboard.org/careers/arts-visualand-performing-web-designers) says, “part artist and part computer geek.”

Many [careers in art](https://theartcareerproject.com/careers/) exist – art director, illustrator, portrait artist, [graphic designer](https://theartcareerproject.com/careers/graphic-design/), and others – and working as a web designer is one way to use your artistic abilities in a rapidly growing field. Combining what you love with meeting a client need means earning a reliable salary.

**What Does a Web Designer Do?**

Designers and developers help clients create their virtual presence. A [web designer](https://theartcareerproject.com/become/web-designer/) transforms a brand into an online experience. In his designs, the web designer thinks not only about the overall design of the website, but also about its function. A website must contain all the information the company wants to communicate to its visitors, and visitors must enjoy using the site to find the information.

Web designers work with the client to understand what they want their website to do. Sometimes, designers may simply revise an old website to improve the design and/or the function of certain features. For other clients, the designer may have to start the design process from scratch. While some companies need a complete website, other clients may want a basic landing page that they can grow into additional pages as their client base grows. Web designers must remain flexible and consider the client’s desires – and budget – most of all.

Online presences continually change, so maintaining a good relationship with the client is imperative. Clients may simply need a microsite that links to their primary site to feature a specific product, or they may want ongoing digital packages that the designer can update as needed. Some designers are very hands-on, implementing each change themselves for the client. Other web designers utilize a platform that enables clients to make their own edits, or they partner with other digital firms for certain aspects of the design. Many firms or design professionals are contracted for web support and upkeep according to a designated time frame.

A web designer often works with a team of other professionals, including information architects, [UX (user experience) experts](https://theartcareerproject.com/careers/ui-ux-design/), marketing team members, sales staff, and more. Designing with all these moving parts in mind can make the designer’s job more challenging. A web developer is another part of the team, and he or she is the professional who pulls together all the perspectives and talents of the various team members to create the finished working product.

**Differences Between Web Designers and Web Developers**

Because the names are so similar, you may wonder: “What’s the difference between web designers and developers?” While the web designer’s role is design, the web developer’s job is more technical. These jobs require two [different skill sets](https://skillcrush.com/blog/difference-between-web-designer-and-web-developer/) and types of experience and education. Some employers may use the terms interchangeably, but designers and developers are actually two different positions, each focusing on different parts of a website’s back end development.

While a web designer focuses on the aesthetics – the layout, webpages, color, fonts, buttons – of a website, the web developer, or programmer, works to make the site function correctly. Developers are experts in languages such as Ruby, Java, Python, PHP, and Rails, to name a few, while designers use Photoshop, JavaScript, HTML, and CSS (cascading style sheets). [Prachi Londhe of Red Balloon Advertisers says](https://redballoon.in/what-are-the-differences-between-web-developers-and-web-designers/) that designers use the “creative part of the brain… the right brain, while development takes the logical and reasoning side of the brain [the left brain].” Designers work with the visual design and the user interface, and developers find the logical solutions to make the site work.

Web development requires additional qualifications and a more in-depth understanding of computer science than is expected in a web designer. These design and development professionals work hand-in-hand to transform the initial visual design into a working product.

A web designer approaches a project creatively, designing the site to reflect the brand and attract and keep key visitors. Front-end developers make sure all the elements of the design transition, fit, and link as they should. A back-end developer is even more obscure in the process. She ensures the hidden parts work correctly (servers run; pages load, not only correctly but quickly, etc.). Website developers who manage both front-end development and back-end development are called full-stack developers.

**What Are the Job Responsibilities of a Web Designer?**

Successful web designers are experts in blending creative form and technical function. They develop user interface designs that not only attract but retain visitors to the site. By staying up to date on both the trends and technological advances in visual design, they design the site to make its visitors have an experience they can navigate easily and engage with readily. [Design Hill](https://www.designhill.com/design-blog/tips-for-becoming-a-successful-web-designer/) advises designers to spend “an hour each day or a day or two in a week dedicated to learning new things in your field.” Web design means lifelong learning to stay abreast with rapidly changing technology in computer science.

The [best web designers](https://artisantalent.com/job-descriptions/web-designer-job-description/) are experts in human psychology. They know how to design with the customer in mind to create websites, microsites, online advertising, social media initiatives, and mobile apps that are both compelling and intuitive. They know how to discuss complex technical matters with clients and brand managers so they can easily understand them. They communicate well, both orally and in writing, to discuss their concepts and articulate their design approaches. Web designers know how to tailor the design and structure of a company’s website to increase conversions and generate more sales of the company’s product.

A team environment – developers, brand management, media buyers, art directors, copywriters, audio experts, photographers, engineers, illustrators, marketers, IT professionals, and others – is characteristic of website creation, so designers should work well with other diverse personalities. The best designers are highly organized, self-motivated, and skilled at prioritizing work to meet deliverable deadlines.

Web designers must not only plan the visual design, but also install and configure the software that runs it, author and format the programming languages, ensure compatibility with various platforms, establish the links, and register the website with a popular search engine such as Google. The job isn’t over after the initial design: A web designer also usually maintains the site, completes ongoing design needs, such as promotions and ad banners, seasonal updates, and more. User testing is an ongoing process to update the site as required.

A project manager or brand manager may work as a liaison to meld the client’s needs, vision, and budget with the professional web designer’s ideas. The client’s sales and legal teams may contribute insight and feedback for the direction of the website design.

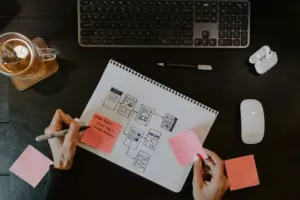
**Helpful Links**

[[](https://theartcareerproject.com/evaluating-roi-graphic-design-degree/)](https://theartcareerproject.com/evaluating-roi-graphic-design-degree/)

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**Value-Added Services a Web Designer Might Offer**

A web designer may offer additional [value-added services](https://www.sitepoint.com/7-value-added-services-web-designers-can-offer-clients/) by learning how to do the jobs closely related to web design, such as email marketing campaign management, cascading style sheet (CSS) creation, or writing product descriptions. A skilled professional who is capable of filling more than one role is more valuable to the firm. Additionally, it enhances the designer’s job prospects when he’s ready to make a change.

For some companies, a web designer may assume the same skill set and assignments as a web developer. By doing so, he becomes more of a “one-stop-shop” professional. Working in both positions may necessitate having a broader understanding of search engine optimization (SEO), keywords, writing, design, coding various programming languages, and the other technical aspects of both back- and front-end development.

A graphic design position is closely related to web design, so a website designer may offer this service as well. A graphic designer determines the look of the brand for both print and digital purposes, but his primary focus is on one- or two-dimensional layout and design and less about UX (user experience) or UI (user interface) design and web function.

**Who Hires Website Designers?**

In today’s digital world, consumers shop online in increasing numbers. Statista [reports](https://www.statista.com/statistics/272391/us-retail-e-commerce-sales-forecast/) that in 2019, retail shopping added up to $365.2 billion worth of sales, and by 2024, experts project online sales to equal almost $600 billion. By 2024, online clothing and accessories’ sales will amount to $194.4 billion. This increase in online traffic means businesses can’t afford to keep their storefront off the internet. Without a well-designed, mobile-friendly website, most businesses can’t exist. This increase in online traffic has increased the [job outlook for web designers](https://www.lifewire.com/web-design-jobs-outlook-3468885).

**Additional Stats for Web Design Professionals**

The [United States Bureau of Labor Statistics (BLS)](https://www.bls.gov/ooh/computer-and-information-technology/web-developers.htm) groups web designers into the same category as jobs in graphic design and web development. Graphic designers earn an average salary of $50K each year, while web developers make an average of $69K. For web developers, job growth is projected to skyrocket at 13 percent, while graphic design jobs are expected to increase at a much slower rate, only 3 percent. The rapid growth in the digital and virtual aspects of design can be attributed to the rise of mobile devices and Wi-Fi. Lifewire reports that the average salary of a web designer is around $70K, with a low-end salary of $40K. According to [PayScale](https://www.payscale.com/research/US/Job=Web_Designer/Salary), web designers typically earn between $35K and $74K, depending on their location. Urban areas, such as New York and Los Angeles, have a higher cost of living, so salaries are proportionately higher. You can save money by working in a smaller city, but the trade-off is that the employee pool may be smaller.

* **Working for a Design Firm**

In a larger firm, web design professionals usually work with many clients, although some may work with a team of in-house professionals with one client or a small group of clients. At a smaller firm, depending on its size, the web designer may have one job or many different (but related) tasks. Designers at a small firm may be required to work on print campaigns as well as with digital, manage certain aspects of back-end development, and even write the copy for the website.

* **Working as a Freelance Web Designer**

Self-employed (or freelance) individuals must wear many hats (designing, developing, writing, billing, etc.). They work as independent contractors. A freelancer can select clients and turn away those who aren’t a good fit, but finding clients can prove challenging. A good freelancer usually has steady clients, but typically, they face a lot of financial uncertainty. A freelancer usually sets his own rates, which depend on what clients are willing to pay.

* **Working as an In-House Web Designer**

A large company may hire a professional to become familiar with their brand. This means this person becomes an expert in the client’s brand direction, legal and design mandatories, and design preferences. They often serve as mentors to other in-house professionals and make design decisions based on their knowledge of the client’s brand.

**Important Qualities for Web Designers**

Web designers must be able to solve problems that are unique to the client’s business, industry, and target audience. While remaining within the parameters of web design and development, they meet deadlines, adhere to strict budgets, and create a final product that aligns the desires of the client with the demands of their online visitors.

**Key Skills and Competencies**

Web designers must be proficient in multiple software programs, web applications, and computer languages, including:

* The most recent version of the Adobe Creative Suite, including InDesign, Photoshop, Illustrator, and Dreamweaver
* Wireframing tools
* Knowledge of SEO and keyword strategies
* Balsamiq
* JQuery
* Javascript
* Enterprise Content Management Systems
* Visual Studio
* HTMLS and CSS3
* WordPress, Squarespace, Wix, and Weebly
* PHP, MySql and jQuery

**Essential Traits of a Web Designer**

To be a good web designer, your abilities should go beyond skills and industry knowledge. Certain qualities and personality traits are helpful to a web designer. Although you can practice and improve upon many of these characteristics, a number of traits are necessary to complete the job effectively:

* **Team Player**

The web designer typically works as one cog in a much larger machine, and he has the ability to brainstorm, create concepts, and adjust expectations in ways that benefit the entire team.

* **Organized**

Completing deliverables on a timely basis and launching a web design according to a specific time frame require a high degree of organization and self-direction.

* **Consistent**

Design elements must appear cohesive across an entire website, as well as on every platform and browser on which the site will appear. Design also must align with all the client’s mandatories, including their logo and legal requirements, fonts, and colors. The design must be consistent with all printed materials, microsites, ad banners, social content, and other digital content.

* **Ability to Take Direction**

A successful designer works with clients, teammates, outside developers, freelance talent, and many others. She must be able to receive input from every source without involving her ego and remain flexible.

* **Takes Rejection Well**

Usually, the design process includes multiple ideas, rough concepts, and many shifts in direction. The web designer must be able to participate in the idea phase without becoming overly attached to initial ideas and have the ability to respond well to feedback that’s not always positive.

* **Mathematics Skills**

Web design involves designing for many different dimensions and sizes, all of which involve mathematical expertise.

* **Continual Learner**

Web design trends and the technology involved in creating digital design change rapidly. Effective web designers stay abreast of industry changes and advances in technology to offer designs that reflect current trends and take advantage of the capabilities of the programs they use most often.

* **Creative**

A designer must be able to create innovative concepts that are striking and unique.

* **Empathy**

You must be able to experience your web design as if you were a visitor to the site and know how to best meet the visitor’s needs when navigating the site.

* **Detail-Oriented**

Your design must function correctly, which requires the completion of many small, but important, tasks to ensure a seamless design.

**Related Articles**

[The Renaissance of Digital Art: How Technology is Reshaping the Creative Landscape](https://theartcareerproject.com/how-technology-reshaping-creative-landscape/)

[Starting Your Own Fashion Label](https://theartcareerproject.com/starting-your-own-fashion-label/)

[How Interior Designers can Maximize their Earnings](https://theartcareerproject.com/how-interior-designers-can-maximize-earnings/)

[Redefining What it Means to Make a Living on Your Creativity](https://theartcareerproject.com/redefining-make-living-creativity/)

[Evaluating the ROI of a Graphic Design Degree](https://theartcareerproject.com/evaluating-roi-graphic-design-degree/)

[What Is the Best Fashion Designer Salary?](https://theartcareerproject.com/fashion-designer-salary-guide/)

**Become a Web Designer**

If becoming a web design professional sounds like an attractive career prospect, you should complete a number of steps to acquire the education and skill set you’ll need to find a job in the field. Karen McGrane, a freelance web designer, says that you should begin your training in high school. She advises aspiring designers to not get locked into the idea that a “strictly technical education” is necessary for web design. The job isn’t just about coding, she says; instead, it’s about “understanding human behavior and decision-making.” To learn about these concepts, she advises a “well-rounded liberal arts education” that includes courses in art, social studies, and writing. During the design process, web designers often must communicate their ideas with rough sketches, so obviously, you’ll need good drawing skills. Practice your skills until you can easily create mockups to portray your concepts to your team. Most firms require a degree, but having one isn’t always necessary. However, a degree increases your likelihood of getting hired. To find the position you want, [you must](https://www.mediabistro.com/climb-the-ladder/skills-expertise/what-does-a-web-designer-do-anyway/):

* Create a portfolio that showcases your work. Portfolio creation is often a requirement for your design school application, but keep it updated as you gain experience and your designs win awards.
* Learn computer design programs, web applications, and web design trends.
* Acquire the education and/or experience needed to land a top web design job. Graduate from a degree or certification program.
* Participate in an internship to gain professional exposure and experience.
* While in design school, take on web design projects for friends and acquaintances. During the hiring process, you can show the HR personnel some of your commissioned projects or mockups.
* Complete a resume.
* Apply and interview for jobs.
* Participate in ongoing education to keep your skills up to date in the rapidly evolving world of design and technology.
* Join professional organizations such as the [American Institute of Graphic Arts (AIGA)](https://www.aiga.org/), Digital Divas, the Guild of Accessible Web Designers (GAWDS), or the [HTML Writers Guild](http://hwg.org/).

Most designers earn a degree such as a two-year associate’s degree or a more [traditional four-year bachelor’s degree (BA)](https://theartcareerproject.com/schools/graphic-design/). Some web designers go on to earn a master’s degree.

**Associate’s Degree in Web Design**

During your associate’s degree course of study, you will learn how to design digital work for desktops, tablets, and mobile devices. Foundational courses include HTML, CSS, and JavaScript. You’ll also study typography as it applies to the web, image manipulation, and e-commerce. An internship and a powerful portfolio help your hiring prospects.

**Bachelor’s Degree in Web Design**

In this four-year program, you’ll take the same classes as associate’s degree students along with additional courses in advanced database structure, graphic design tools, visual frameworks, design programs for web applications, visual frameworks, and human/computer interface design. You’ll learn how to create an [effective online portfolio](https://theartcareerproject.com/things-to-remember-creating-art-portfolio/) that gives prospective employers a preview of your web design skills.

**Master’s Degree in Web Design**

Master’s degree programs are for those web design professionals who want a senior position in the field or for developers. Prior to beginning the program, you must have an undergraduate degree from an accredited college or university. Just to apply, you’ll need a professional resume and two letters of recommendation. Master’s-level coursework includes classes in advanced information technology, enterprise architecture, usability design, and database design principles. You also may study systems analysis and design and take courses in the legal and ethical responsibilities for IT professionals.

**Top Degrees and Certifications for Web Designers**

Not all companies require a four-year degree. To enhance your marketability, you may want to earn certifications to help you stand out in a crowd of applicants. Certificate degrees are offered at both the graduate and undergraduate level. Although they aren’t as in-depth as a two- or four-year degree, certificate programs offer proof that you’re trained in certain areas. College experience isn’t required for undergraduate certificate programs, but applicants must have a high school diploma or GED. Foundational certification programs offer classes in basic web design, web animation, fundamentals of typography, information design, and media portfolio.

For acceptance into a graduate-level certificate program, you must have a bachelor’s degree. Fundamental courses in graduate web design certificate programs include Python programming, principles of project management, and application security. Additional examples of certifications a web design professional can acquire include:

* Adobe Certified Expert (ACE)
* Certified Web Development Professional through Mark Lassof
* Microsoft Developer Certification (MTA & MCSD)
* Google Analytics IQ
* Google Adwords
* freeCodeCamp Certifications
* Hubspot Academy Web Design Certification
* Zend Certified PHP Engineer

These certifications, along with a traditional degree, may improve your opportunities for employment. Additionally, an internship with a reputable, award-winning design firm enhances your hiring chances. Practice your interviewing skills and role-play with a friend until you can present your portfolio with confidence.

**Frequently Asked Questions for Web Designers**

**How Can I Strengthen My Design Degree?**

To improve your opportunity for landing a job, you can improve on the skills you’ve already acquired. Take communication classes, such as speech and writing, to help you be able to present your ideas during the hiring process. If you’re a skilled graphic designer, learn how to read and write code. Practice your drawing and illustrating skills. Take a photography class to improve your photos. If you plan to freelance, take a class in marketing or business education.

**How Do I Build a Portfolio for Web Design?**

You will need a professional-level portfolio that represents your aesthetic range and technical skills. Designers use [websites](https://www.digitalartsonline.co.uk/features/creative-business/16-best-portfolio-websites-for-designers-artists/) such as Behance or Adobe Portfolio to showcase their best work. And, of course, you should create your own digital portfolio to show prospective employers. Designers who publish a [creative, innovative portfolio website](https://www.shopify.com/partners/blog/web-design-portfolio-inspiration) get a head start in an overcrowded job market. For instance, web designer [Robby Leonardi](http://www.rleonardi.com/) highlights his online resume with a game, so visitors can interact with his information whle having a memorable, fun experience.

[Treehouse design blog](https://blog.teamtreehouse.com/5-tips-creating-perfect-web-design-portfolio) advises web designers to “dress for the job you want, not the one you have” by highlighting the vertical in which you want to work. For instance, if you want to design websites for real estate companies, feature that type of work in your website. Edit your work and profile only your best work on your website. Try to tell a story so visitors will have an engaging, memorable experience. Keep your online portfolio fresh by updating it every time you work on a project that wins awards or makes your client happy. Word of mouth circulates quickly in the design community, and good reviews can help you get more work.

If you don’t have a lot of work to feature on your portfolio, do some pro bono design for non-profits, friends, and family. Even small businesses need an online presence in today’s digital universe. Offer to create a website for them at a reduced rate, so you can add it to your portfolio.

**How Long Does It Take to Become a Professional Web Designer?**

The initial learning process take four years or less. During the first two or four years of a degree program, you will practice your skills. If you skip a degree program in website design, you may intern for several months up to a year while working on certifications and designing work for your portfolio.

**What Are the Hallmarks of Excellent Web Design?**

Web designers use their art and communication skills to help companies build their online presence. The best web design goes far beyond a simple website built with WordPress. Forbes says that [good designs](https://www.forbes.com/sites/forbescommunicationscouncil/2019/01/28/seven-aspects-of-website-design-crucial-for-drawing-in-customers/#4ffdbd744137) are unified in design, messaging, and user interface. The design is minimal, and navigation is easy. Contact info and forms are easily accessible so visitors can access the information they come to the site to find. Many sites also include blog posts or insights pages that allow for the addition of effective SEO and keyword-rich content.

Forbes also cautions web designers to use the 4-second test. According to Google Analytics data, younger generations have an average online attention span of 2.8 to 8 seconds. These short attention spans pose a challenge for web designers. All the important information must be quickly accessible and engaging enough to make the consumer continue to read.

Since so many website visitors interact with the web on their smartphone, mobile presents another challenge for web designers. Imagery must work across every kind of platform, so the website must be mobile-friendly and intuitive. Copy is also important. Websites must be written in a tone and voice that consumers recognize. In addition, the content should be meaningful and concise to keep the visitor on the page. To earn optimal page ranking, the designer should always keep search and search engine optimization and the target visitor in mind.